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ABSTRACT

Social support is defined, and its place in the broader scheme of support systems is delineated. The literature relating this concept to various aspects of health is summarized, and a possible theoretical explanation for the way in which social support acts to promote the health of individuals is proffered. Social support, defined as the sum of emotional support, esteem support and network support, has beneficial effects on a wide variety of health variables throughout the life cycle from conception to just before death, and on the bereaved who are left behind. Social support facilitates stress reduction by improving the fit between the person and the environment. Training in supportive behavior should be built into the routines of homes and schools, and support worker roles should be institutionalized. (Author/RF)

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SOCIAL SUPPORT AND HEALTH THROUGH THE LIFE CYCLE

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All the worlds great religions support the Golden Rule in one form or another. "Love thy neighbor as thyself," (Leviticus XIX 18) has been the advice of our spiritual leaders for many centuries. Only lately have those of us concerned with health come to realize the importance of this kind of prescription. We tend to call this social support and to fit it into a general notion of support systems. In this essay I shall attempt to do three things: explain what social support is and where it fits in a broader scheme of support systems, summarize the rather overwhelming literature relating this concept to various aspects of health and discuss a possible theoretical explanation for the way in which social support acts to promote the health of individuals.

There are four kinds of support. The first and most important is social support. It is sometimes called communicated caring. It is purely informational in nature and it has three components. (1) Emotional support leading the recipient to believe that she is cared for and loved. (2) Esteem support leading the recipient to believe that she is esteemed and valued. (3) Network support leading the recipient to believe that she has a defined position in a network of communication and mutual obligation.

The second form of support is instrumental support or counseling. This involves guiding a person to better coping and/or adaptation and to maximization of their participation and autonomy.

The third is active support or mothering. This is what mothers do for infants and nurses do for patients. When done unnecessarily it may lead to dependency.

The fourth is material support or goods and services. This is the equivalent of Kahn's "aid." The provision of goods and technical services might be thought to include active support. The distinction can be made clear by the example of an overworked executive. If his boss comes and does part of the job for him, it comes under the rubric of active support and can fit into the sequence of mothering-smothering-spoiling. On the other hand, if the

boss permits the executive to hire himself an assistant and/or buy a piece of equipment to expedite his work it comes under material support.

It is important to note that instrumental support, active support, and material support may involve or imply social support. For example, taking the time to counsel a student may communicate that you care. In feeding a special meal to her grown son, a mother communicates love as well as providing nourishment. In giving a student a scholarship one communicates esteem as well as providing money. Because of this confounding the focus of any support system will always appear to be on social support. This is important as a source of bias in research, but is probably entirely appropriate for it is my belief that social support is more important than all the others put together. (Cobb, 1976)

With this view of the position of social support, let us examine its components in more detail. Emotional support is information that one is cared for and loved or as the Greeks might say information about agapé. It is transmitted in intimate situations involving mutual trust. In a dyadic relationship this information meets Murray et al.'s (1938) need succorance for one person, need nurturance for the other, and need affiliation for both. This is part of what Kahn has called positive affect in the preceeding paper.

Information that one is valued and esteemed is most effectively proclaimed in public. It leads the individual to esteem himself and reafirms his sense of personal worth, and above all it assures him of a personal and separate identity. It is called esteem support, and includes what Kahn has called affirmation.

Information that one has a place in a network of communication and mutual obligation must be common and shared. It must be common in the sense that everyone in the network has the information and shared in the sense that each member is aware that every other member knows. The relevant information is of three kinds. The first is historical. A strong network has a history. Kahn's use of the word "convoy" is appropriate. The second pertains to goods and services that are available to any member on demand, and includes information about the accessibility of services that are only occasionally needed e.g. equipment, specialized skills, technical information. The third contains information that is common and shared with respect

to the dangers of life and the procedures for mutual defense. In this last sense the knowledge that a competently staffed hospital is available in case of need is socially supportive.

The effects of social support on health will be looked at in six categories; the effects during pregnancy, the effects on learning and development, the effects on health at the time of various life crises, the relationship to various specific illnesses plus its effect on compliance with prescribed medical regimens and its general life sparing effect.

With regard to the complications of pregnancy, Nuckolls (1972) has shown that there is an interaction between life change score and social support in the prediction of the proportion who will have one or another complication of pregnancy. My recalculation of her data shows that the interaction is significant and that 91% of those with a lot of life changes and low social support ended up with complications compared to 43% of the other three groups. In addition to this there is some evidence that mothers with unwanted pregnancies are likely to have smaller babies than mothers who desired the pregnancy in the first place. The principal observation in this area comes from a study by Morris et al. in 1977. Curiously the findings are true both for blacks and whites only for those with at least a high school education. These findings were not confirmed by Hultin and Ottoson (1971) in Sweden but their analyses did not control for educational level of the mother. It is, of course, not reasonable to suppose that "wantedness" is information that is transmitted from mother to fetus and thus influences growth rate, rather it seems likely that a women "rejects" her baby and functions less effectively as a mother because she is herself inadequately socially supported. The societal reaction to illegitimate pregnancy is a case in point. These two studies of birth weight did not look at concomitant environmental stresses, and one of them suffers from the disadvantage of being a retrospective inquiry.

The first real adaptive demand that is placed on the child is the achievement of sphincter control. Stein and Susser (1967) report that bladder control at night was significantly delayed for those children whose mothers went out to work while the children were in the second six months of life. This was not true if the mother went out

to work earlier or later. Two studies of the children of mothers who requested abortion but had those abortions refused reported by Forssman and Thuwe (1966) and Dytrych et al. (1975) both suggest, but neither really proves, that wanted children adapt to and/or cope with the stresses of growing up better than those who started out with parental request for abortion that was denied. The thrust of significant results of these two studies seems to be in the socialization area. Particularly striking was the lesser educational achievement of the unwanted children as compared to the controls. These studies, one done in Scandinavia and the other in Czechoslovakia, deserve to be replicated in this country now that abortions are more available.

The next area of concern is the transition to adult life. There are obvious stresses associated with the first job and with the beginning of marital and family responsibilities, but there seems to be little in the way of data about the effect of social support at the time of this transition. Research in this area is clearly indicated. Elsewhere (Cobb and Kasl, 1977) I have examined the effects of social support in moderating the consequences of job termination. The effects are striking with respect to most of the psychological variables, but with respect to the physiological variables examined the effects were only of border line significance. However, when it came to arthritis there was a tenfold increase in the frequency of joint swelling as one moved from the highest third of social support to the lowest.

Erikson (1976) has written eloquently of his observations in the case of the Buffalo Creek flood which destroyed so many homes. He makes it clear that, from an observational standpoint at least, social support was an important variable. However, his most telling comments bear on the extent to which support networks were destroyed by the newly developed housing arrangements and the consequences of this loss of network support.

Weiss (1975) has noted the importance of social support for those going through a divorce, and many authors have noted the importance of social support under the stress of war (Rose, 1956; Mandelbaum, 1952; Titmuss, 1950; Swank, 1949; Reid, 1947) Menninger (1947), describing his World War II experiences said, "We seemed to learn anew the importance of group ties in the maintenance of mental health."

As old age approaches, infirmity begins and retirement

takes place, further stresses occur. Much informal information has been published about the importance of social support at this time of life but there is relatively little hard evidence. Blau (1973) and Lowental + Haven (1968) present evidence that is at least suggestive that depression at this time of life is less frequent among those who are adequately socially supported. This, of course, is not a novel finding for as will be seen in the next section there is evidence that social support is protective with respect to depression throughout life.

When we come to bereavement the evidence is less strong than one might expect for most of us act as though the bereavement period were a period requiring social support. Parkes (1972) and Burch(1972) present suggestive evidence. The data of Gerber et al. (1975) bear more directly on the subject but are disappointing in their presentation. They are at least suggestive of effects in the predicted direction. However, Raphael (1977) has presented striking evidence that those with little social support are more likely to report poor health thirteen months after bereavement than are those with more adequate support. Furthermore, he is able to demonstrate that supportive treatment for those with little social support leads to a return to the normal state of affairs at thirteen months. See Table 1.

Having skimmed the life cycle and shown effects at almost every stage, it is time to turn to some specific diseases. The relationship to diseases is of two sorts. First there are associations of lack of social support with onset of the disease e.g. tuberculosis reviewed by Chen and Cobb (1960), depression,(Brown and his associates 1975 + 1977), arthritis (Cobb + Kasl, 1977), and coronary heart disease noted by many authors in many ways (Caplan, 1971) but most notably by Parkes (1969) in his article entitled "The Broken Heart" in which he discusses the excess of coronary deaths among those men who have recently lost their wives. Second there is evidence that recovery from cardiac failure (Chambers and Reiser, 1953), tuberculosis (Holmes et al., 1961), surgical operation (Egbert et al., 1964), asthma (deAraujo et al., 1973), psychosomatic illness (Berle et al., 1952), and various psychiatric illnesses (Lambert, 1973; Caplan, 1974; Hermalin, 1976; Brown, 1959) is accelerated or facilitated by high levels of social support.

Part of this facilitation of recovery is mediated by improved compliance. It is an interesting and little known fact that the association of compliance and social

support is one of the best documented relationships in all of medical sociology. Specifically if a physician wants a patient to follow a complex routine for the maintenance of his health, as in hypertension, it is almost essential that he pay attention to the support systems in the patient's life. The literature in this area is summarized in two separate reviews (Baekeland and Lundwall, 1975; Haynes and Sackett, 1974). Of 41 articles, 34 support the association, 6 give insignificant results and 1 reports a negative finding. The association of lung cancer with cigarette smoking at the time of the Surgeon General's report was hardly stronger than that and yet this is an almost entirely neglected aspect of medical practice.

In the end one always gets involved with matters of life and death, and it is appropriate here to call attention to two important findings. The first has come to be known as the Phillips effect. In a truly remarkable paper Phillips and Feldman, (1973) demonstrated in five separate studies that deaths are reduced in the six months proceding birthdays and increased in the succeeding six months. A summary of their data is presented in Figure 1. They went on to hypotesize that if this were a social support effect, it should be more striking for the most distinguished people. They found this hypothesis to be dramatically confirmed.

The second important study was reported by Berkman at the last annual meeting of the American Public Health Association, (1977). She provided data from the California Human Population Laboratory study of 7,000 residents of Alameda County which shows that over a ten year period age adjusted mortality is reduced among those who have good network support. The support was measured in advance by 1) marriage, 2) contact with close friends and relatives, 3) church membership, 4) informal and formal group associations. There were successive decreases in age adjusted mortality rates for each of the four levels of social support for both males and females. The effect was independent of and in addition to the effect of positive health practices reported by Belloc, (1973). The risk of dying more than doubled from the highest to the lowest category of network support. We will all look forward with interest to the final publication of the detailed analyses of this important phenomenon.

Some of the effects of social support appear to be direct or main effects and others appear as interactions with stresses in the social environment. In my view it is

not worth worrying about the distinction between main effects and interaction effects for several reasons. The first is that few if any lives are entirely free of social and psychological stress so when main effects appear it may be that unmeasured stresses are producing an interaction effect that is large enough to appear also as a main effect. The second point is that it is quite reasonable to imagine that at very low levels of social support the deprivation would be strong enough to be a stress in itself while at medium levels it would take some other environmental stress to highlight the deficit and at the highest levels protection from strain might be very substantial. This notion is displayed graphically in Figure 2.

The implications of this theory are very interesting because they include the prediction that the interaction effect would look quite different for a dichotomy between high and medium than for the dichotomy between medium and low. This would be especially true if the range of stress measured were limited, say from A to B in the diagram. If this formulation is correct we should not be worried about main effects vs. interaction effects but should rather be concerned with mapping the three dimensional relationship between the variables.

When it comes to thinking about the mechanism involved it seems unlikely that social support could operate directly on so many indications of strain. It makes more sense to hypothesize that it operates to facilitate stress reduction by improving the fit between the person and the environment (French et al., 1975). The hypothesis is displayed in Figure 3. The three components of social support are located in the box in the middle of the figure. The arrows from Esteem Support and Emotional Support to Adaptation indicate the belief that those who are esteemed, therefore self confident, and emotionally supported, therefore comfortable, are more able to change themselves to fit into a changed environment. Similarly, those who are confident have a sense of autonomy and are more likely to engage in coping behavior and so are more likely to take control of their environments and manipulate these environments into a more acceptable shape. By the same token, Network Support and Esteem Support contribute to a sense of participation in decision making which likewise contributes to environmental control or at least to the "illusion of control" which Perlmuter and Monty (1977) have shown may be as important as actual control.

In summary, social support, defined as the sum of

emotional support, esteem support and network support, has beneficial effects on a wide variety of health variables throughout the life cycle from conception to just before death and on the bereaved who are left behind after a death. There are many faults in the various studies, but the repetitive nature of the effects using varied techniques is impressive. The pervasiveness of these social support effects suggest that we are dealing with a very general phenomenon and a really fundamental variable. One cannot escape the conclusion that the world would be a healthier place if training in supportive behavior were built into the routines of our homes and schools, and support worker roles were institutionalized.

Table 1. The Relationship of Perceived Social Support to Health Status of Women 13 Months After the Death of Their Husbands (Raphael, 1977).

Perceived Social Support	Reported Health at 13 Months: Good	Poor	Total	Percent Poor
1. Adequate	115	33	148	22
2. Inadequate	2	12	14	86
3. Inadequate--"Treated"	14	2	16	13

1 vs 2 $X^2 = 25.6$, P 0.001

2 vs 3 $X^2 = 13.3$, P 0.001

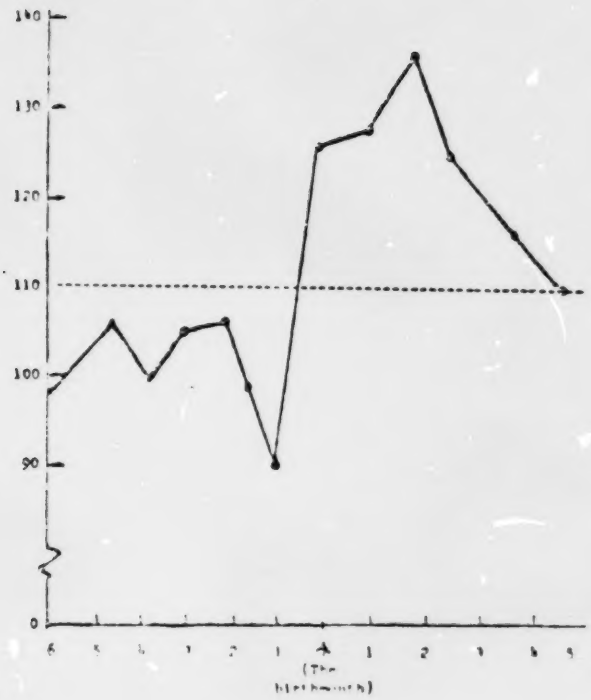

Fig. 1. Number of deaths before, during, and after birth month (all five samples combined).

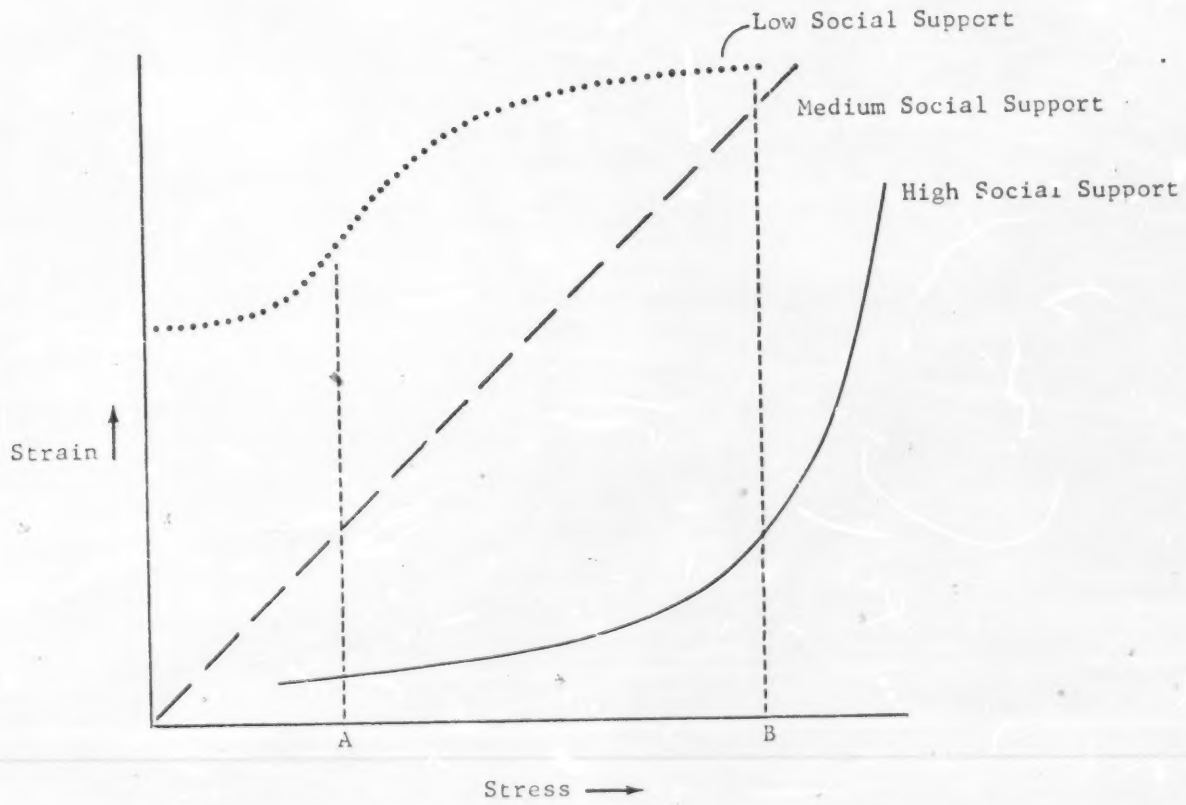

Figure 2. An hypothesis about the nature of the relationship of stress and strain in the face of varying levels of social support.

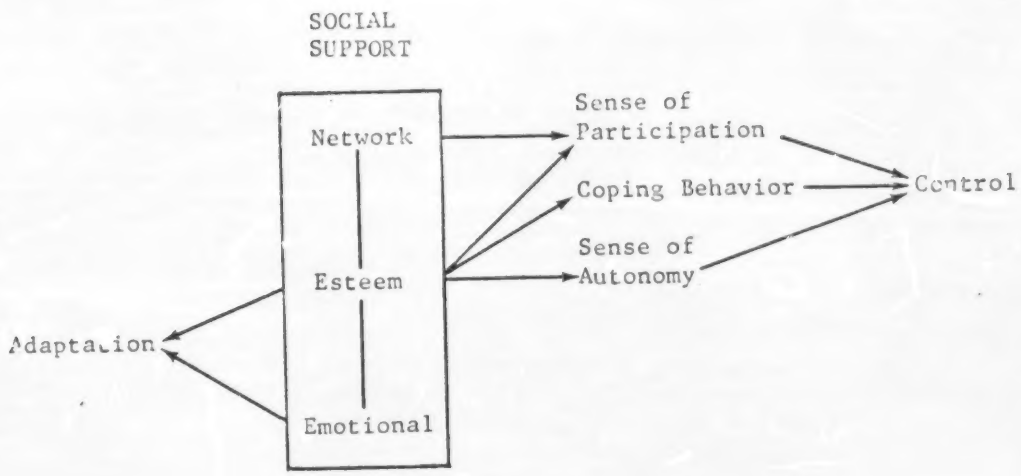

Figure 3

An hypothesis about the mechanism through which social support might operate to improve an individuals relationship with the environment thereby reducing psychosocial stress and thus relieving strain.

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